CLAIMS

What is claimed is:

1. In a connection-oriented networking environment, a method comprising:

   providing a connection between a plurality of clients using a plurality of nodes coupled together through a plurality of trunks; and

   automatically adjusting utilization capacity of the plurality of trunks using standards-based signaling.

2. The method of claim 1, wherein the standards-based signaling is private network-to-network interface (PNNI) protocol signaling.

3. The method of claim 1, wherein the adjusting is performed for a call connection between a plurality of clients.

4. The method of claim 1, wherein the adjusting comprises assigning a percentage utilization factor.

5. The method of claim 2, wherein a percentage utilization factor is part of a PNNI signaling message.

6. The method of claim 5, wherein the PNNI signaling message is associated with a call placed between a plurality of clients.

7. The method of claim 2, wherein a percentage utilization factor is part of a general application transport information element that is part of a PNNI signaling message.

8. The method of claim 2, wherein a percentage utilization factor is part of a percentage utilization factor information element that is part of a PNNI signaling message.

9. The method of claim 1, further comprising overbooking a trunk to maximize utilization of the trunk capacity.

10. The method of claim 9, further comprising monitoring a trunk for determining the utilization capacity of the trunk.

11. The method of claim 10, further comprising varying a value of a percentage utilization factor for a subsequent call based on results obtained through the monitoring.

12. The method of claim 1, further comprising:

    receiving a call setup request from a client;

    evaluating a path in the networking environment for transmitting the requested call; and

    transmitting the requested call over the evaluated path.

13. The method of claim 12, wherein transmitting further includes sending a percentage utilization factor in a standards-based signaling message along with the requested call.

14. The method of claim 12, wherein evaluating comprises selecting a path based on network resources available at the time of the call setup request from the client.

15. The method of claim 1, further comprising allowing a node in the network to make a decision as to whether or not to apply a percentage utilization factor transmitted in a standards-based signaling message.

16. The method of claim 15, wherein the decision by the node is to apply the percentage utilization factor in order to change bandwidth allocation.

17. The method of claim 15, wherein the decision by the node is to forward the call without applying the percentage utilization factor.

18. The method of claim 16, wherein the change in bandwidth allocation is based on the percentage utilization factor in addition to any preexisting bandwidth allocation.

19. The method of claim 16, wherein the change in bandwidth allocation comprises using the percentage utilization factor to override any preexisting bandwidth allocation.

20. In a switch of digital communications network, a method comprising:

establishing a connection with at least one other switch for a call with an amount of bandwidth allocated for the call,

signaling a percentage utilization factor associated with the call;

using the percentage utilization factor to automatically reduce the amount of bandwidth allocated for the call.

21. The method of claim 20, wherein signaling a percentage utilization factor comprises sending a private network-to-network interface (PNNI) protocol signaling message containing the percentage utilization factor.

22. The method of claim 20, wherein the percentage utilization factor is based on statistics regarding trunk usage.

23. The method of claim 20, wherein the percentage utilization factor is based on a quality of service requested.

24. The method of claim 26, wherein the percentage utilization factor is automatically updated for a subsequent call.

25. The method of claim 24, wherein the automatic updating of the percentage utilization factor is based on statistics regarding monitored trunk usage.

26. A switch for a digital network, comprising:

means to automatically adjust utilization capacity of a trunk of the network using a percentage utilization factor transported in a signaling message.

27. A switch for a digital network, comprising:

a processor to automatically adjust utilization capacity of a trunk of the network using a percentage utilization factor transported in a signaling message.

28. The switch of claim 27, wherein the signaling message is a private network-to-network interface (PNNI) signaling message.

29. The switch of claim 28, wherein the PNNI signaling message is a PNNI setup signaling message.

30. The switch of claim 28, wherein the percentage utilization factor is transported in an information element of the PNNI signaling message.

31. The switch of claim 30, wherein the information element is a general application transport information element.

32. The switch of claim 30, wherein the information element is a percentage utilization factor information element.

33. The switch of claim 27, wherein the processor overbooks the trunk in the network to maximize utilization of trunk capacity.

34. The switch of claim 27, wherein the processor monitors the trunk to determine utilization capacity of the trunk.

35. The switch of claim 34, wherein the processor varies a value of the percentage utilization factor for a subsequent call based on results obtained through the monitoring of the trunk.

36. A storage medium having stored therein a plurality of machine executable instructions, wherein when executed on a switch in a digital network, the instructions perform a method comprising:

establishing a connection with at least one other switch for a call with an amount of bandwidth allocated for the call;

signaling a percentage utilization factor associated with the call; and

using the percentage utilization factor to automatically reduce the amount of bandwidth allocated for the call.

37. A storage medium having stored therein a plurality of machine executable instructions, wherein when executed, the instructions perform a method comprising:

providing a connection between a plurality of clients using a plurality of nodes coupled together through a plurality of trunks; and

automatically adjusting utilization capacity of the plurality of trunks using standards-based signaling.

38. The storage medium of claim 37, wherein the standards-based signaling is private network-to-network interface (PNNI) protocol signaling.

39. The storage medium of claim 37, wherein the automatic adjusting of utilization capacity is based on a percentage utilization factor transported in a standards-based signaling message.

40. The storage medium of claim 39, wherein the standards-based signaling message is a private network-to-network interface (PNNI) setup signaling message.

41. A network system comprising:

    means for providing a connection between a plurality of clients using a plurality of nodes coupled together through a plurality of trunks; and

    means for automatically adjusting utilization capacity of the plurality of trunks using standards-based signaling.

42. The network system of claim 41, further comprising means for transporting a percentage utilization factor by signaling the percentage utilization factor along with a call.

43. The network system of claim 42, wherein the percentage utilization factor is contained in a private network-to-network interface (PNNI) signaling message.

44. The network system of claim 43, wherein the PNNI signaling message is a PNNI signaling setup message.

45. The network system of claim 42, further comprising means for monitoring a trunk for determining a utilization capacity of the trunk.

46. The network system of claim 45, further comprising means for varying a value of the percent utilization factor for a subsequent call based on results obtained through the monitoring of the trunk.

47. The network system of claim 42, further comprising means for allowing a node to make a decision as to whether or not to apply the utilization factor signaled along with a call.

48. The network system of claim 42, further comprising means for changing a bandwidth allocation for a trunk based on the percentage utilization factor.